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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,165	12/08/2003	Stephen A. Sekulich	Seal	2173

7590 07/26/2006

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EXAMINER

LEE, GILBERT Y

ART UNIT PAPER NUMBER

3673

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/730,165	<b>Applicant(s)</b> SEKULICH ET AL.	
	<b>Examiner</b> Gilbert Y. Lee	<b>Art Unit</b> 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-30, 51-54 and 71-73 is/are pending in the application.
- 4a) Of the above claim(s) 1-30 and 51-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 71-73 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

1. The amendment filed 5/25/06 has been entered.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Note for reference characters C, D, F, and T see Examiner's Attachment A.

2. Claims 71-73 are rejected under 35 U.S.C. 102(b) as being anticipated by Visconti (US Patent No. 6,056,293).

Regarding claim 71, the Visconti reference discloses an improved housed shaft sealing element (Fig. 1) that has a flex area (F) between the part of the sealing element (9) to bear on the shaft and the part of the sealing element clamped in the housing (5), wherein the improvement comprises:

a circumferential hinge groove (C) in the flex area having a depth (D) less than the thickness (T) of the sealing element in the flex area (see Examiner's Attachment);  
and

a wiper lip (10) including an inside diameter that is greater than the outside diameter of the shaft (Col. 3, Lines 25-31). Note that for the seal to fit on the shaft, the inner diameter of the seal must inherently be greater than the outside diameter of the shaft.

Regarding claim 72, the Visconti reference discloses an improved housed shaft sealing element (Fig. 1) that has a flex area (F) between the part of the sealing element (9) to bear on the shaft and the part of the sealing element clamped in the housing (5), wherein the improvement comprises:

- tapering the thickness (Fig. 1) of the part of the seal bearing on the shaft;
- a circumferential hinge groove (C) in the flex area having a depth (D) less than the thickness (T) of the sealing element in the flex area (see Examiner's Attachment);
- and

- a wiper lip (10) including an inside diameter that is greater than the outside diameter of the shaft (Col. 3, Lines 25-31). Note that for the seal to fit on the shaft, the inner diameter of the seal must inherently be greater than the outside diameter of the shaft.

Regarding claim 73, the Visconti reference discloses an improved housed shaft-sealing-element (Fig. 1) that has a flex area (F) between the part of the sealing element (9) to bear on the shaft and the part of the sealing element clamped in the housing (5), wherein the improvement comprises:

- a circumferential hinge groove (C) in the flex area having a depth (D) less than the thickness (T) of the sealing element in the flex area (see Examiner's Attachment);
- and

- a wiper lip (10) including an inside diameter prior to forming the shaft-sealing-element onto the shaft is greater than the outside diameter of the shaft (Col. 3, Lines 25-31). Note that the interference fit of lip 9 causes the elastic deformation of the

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secondary lip 10 to make secondary lip 10 to come in contact with the shaft. Also for the seal to fit on the shaft the inner diameter of the seal must inherently be greater than the outside diameter of the shaft.

***Response to Arguments***

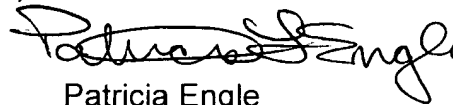
3. Applicant's arguments with respect to claims 31-50 and 55-70 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gilbert Y. Lee whose telephone number is 571-272-5894. The examiner can normally be reached on 8:00 - 4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Patricia Engle', is written over the printed name.

Patricia Engle  
SPE  
Art Unit 3673

GL  
7/21/06

